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NINE MILE POINT NUCLEAR STATION

July 31, 2012

U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

ATTENTION: Document Control Desk

SUBJECT: Nine Mile Point Nuclear Station
Unit No. 2; Docket No. 50-410

Completion of Power Ascension Test Program Associated with License Amendment
No. 66 (TAC No. M87088)

- REFERENCES:**
- (a) Letter from G. E. Edison (NRC) to B. R. Sylvia (NMPC), dated April 28, 1995, Issuance of Amendment for Nine Mile Point Nuclear Station, Unit 2 (TAC No. M87088)
 - (b) Letter from R. B. Abbott (NMPC) to Document Control Desk (NRC), dated November 28, 1995, Nine Mile Point Unit 2 Power Uprate Power Ascension Test Program
 - (c) Letter from R. B. Abbott (NMPC) to Document Control Desk (NRC), dated March 22, 2001, Nine Mile Point Unit 2 Power Uprate Power Ascension Test Program Interim Startup Report (TAC No. M87088)

By letter dated April 28, 1995 (Reference a), the NRC issued Amendment No. 66 to Facility Operating License No. NPF-69 for Nine Mile Point Unit 2 (NMP2). The amendment authorized an increase of approximately 4.3 percent in the maximum steady-state reactor core power level for NMP2, from 3,323 megawatts thermal (MWt) to 3,467 MWt. In conjunction with this license amendment, Niagara Mohawk Power Corporation (NMPC, the licensee at that time) developed a power uprate power ascension test program that was described in the NMPC letter dated November 28, 1995 (Reference b). In Reference (b) it was noted that, as of October 31, 1995, the power uprate power ascension test program could not be completed due to the inability to achieve 105 percent of rated core flow. Specifically, the following tests could not be completed:

IE26
NRR

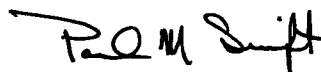
- Test 33, Drywell Piping Vibration
- Test 141, Jet Pump Operability

Subsequent periodic interim startup test report submittals, up to and including NMPC letter dated March 22, 2001 (Reference c), identified reactor recirculation system jet pump fouling as a likely contributor to the continued inability to achieve 105 percent of rated core flow.

NMP2 License Amendment No. 140, Extended Power Uprate (EPU), was implemented during the spring 2012 refueling outage. Activities during the refueling outage also included replacement of the inlet mixers for all 20 of the reactor recirculation system jet pumps. With the installation of this modification, 105 percent of rated core flow has been achieved, allowing the outstanding portions of Tests 33 and 141 to be completed. The results of these tests were satisfactory and are summarized in the Attachment to this letter. Thus, the Power Ascension Test Program associated with License Amendment No. 66 is now completed.

This letter contains no new regulatory commitments. Should you have any questions regarding the information in this submittal, please contact John J. Dosa, Director Licensing, at (315) 349-5219.

Very truly yours,



Paul M. Swift
Manager Engineering Services

PMS/DEV

Attachment: Nine Mile Point Unit 2 License Amendment No. 66 Power Ascension Test Program –
Summary of Results for Tests 33 and 141

cc: Regional Administrator, Region I, NRC
Project Manager, NRC
Resident Inspector, NRC

ATTACHMENT

NINE MILE POINT UNIT 2 LICENSE AMENDMENT NO. 66

POWER ASCENSION TEST PROGRAM

SUMMARY OF RESULTS FOR TESTS 33 AND 141

**ATTACHMENT
NINE MILE POINT UNIT 2 LICENSE AMENDMENT NO. 66
POWER ASCENSION TEST PROGRAM
SUMMARY OF RESULTS FOR TESTS 33 AND 141**

TEST 33 – DRYWELL PIPING VIBRATION

Objective

- a. To verify that the vibration of the reactor recirculation piping is within acceptable limits.
- b. To verify that stresses are within code limits during operating transient loads.

Acceptance Criteria

Level 1: The steady-state vibration levels shall result in stresses which are within acceptable code limits as determined by Niagara Mohawk Power Corporation (NMPC) (now Nine Mile Point Nuclear Station, LLC (NMPNS)) Engineering.

Level 2: None

Discussion

To ensure that operation at uprate conditions (4.3% power increase; License Amendment No. 66) did not significantly affect recirculation system vibration, vibration measurements were taken and analyzed. The measured vibration levels for core flows up to 102% of rated core flow were presented in Table 3.37-1 of the November 28, 1995 letter from NMPC to the NRC. All acceptance criteria were satisfied.

As part of extended power uprate (EPU) implementation (License Amendment No. 140), vibration measurements at core flows up to 105% of rated core flow have been taken and analyzed for both the reactor recirculation (RCS) system piping and the RCS pumps and motors. The data has been compared to the vibration data collected during the original plant startup tests in 1988 and the data collected in 1995 during testing for the 4.3% power increase (License Amendment No. 66). The comparison showed that the increase in core flow to 105% of rated core flow did not result in significant changes in vibration levels and did not introduce any vibration anomalies. All acceptance criteria continued to be satisfied.

ATTACHMENT
NINE MILE POINT UNIT 2 LICENSE AMENDMENT NO. 66
POWER ASCENSION TEST PROGRAM
SUMMARY OF RESULTS FOR TESTS 33 AND 141

TEST 141 – JET PUMP OPERABILITY

Objective

To measure the necessary parameters to create new Technical Specification (TS) jet pump operability curves.

Acceptance Criteria

Level 1: None

Level 2: The jet pump operability curve data has been taken and analyzed.

Discussion

Data for producing uprate (4.3% power increase; License Amendment No. 66) jet pump operability curves was taken along the power/flow line near the 100% rod line. This included recirculation loop flow, drive flow, jet pump flow, and recirculation valve position. As reported in the NMPC letter to the NRC dated November 28, 1995, this testing was previously completed satisfactorily for core flows up to 102% of rated core flow, allowing the creation of jet pump operability curves used to perform the applicable TS surveillance requirements (Section 3.4.1.2 of the 1995 TS).

During the spring 2012 refueling outage, modifications to all 20 of the reactor recirculation system jet pumps were installed. Testing performed during the spring 2012 refueling outage as part of extended power uprate (EPU) implementation (License Amendment No. 140) demonstrates that 105% of rated core flow is achieved with the recirculation loop A flow control valve (FCV) at 89% open and the recirculation loop B FCV at 88.5% open. New baseline data has been obtained and revised jet pump operability curves have been created to perform the applicable TS surveillance requirements (Section 3.4.3 of the current TS).